DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

(707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021471 Address: 333 Burma Road **Date Inspected:** 03-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Segments

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 12BW/12CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CA3012-012, Deck Plate transverse splice. The welder is identified as #046709 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G (1F)-FCM-repair-1 for CWR2844.

Segment 12CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated DP3067-001-009, Longitudinal Diaphragm to Deck Plate hold back weld. The welder is identified as #046709 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

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Cantilever Bracket

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated OBE12C3-PP112.5-001, 002, 003, 004, web to flange. The welder is identified as #040367 and was observed welding in the 1F (flat) position using approved Welding Procedure Specification WPS-B-T-2131-ESAB.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated OBE12C3-PP113.5-001, 002, 003, 004, web to flange. The welder is identified as #040367 and was observed welding in the 1F (flat) position using approved Welding Procedure Specification WPS-B-T-2131-ESAB.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated OBE12C3-PP114.5-001, 002, 003, 004, web to flange. The welder is identified as #040367 and was observed welding in the 1F (flat) position using approved Welding Procedure Specification WPS-B-T-2131-ESAB.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated OBE12C3-PP115.5-001, 002, 003, 004, web to flange. The welder is identified as #040367 and was observed welding in the 1F (flat) position using approved Welding Procedure Specification WPS-B-T-2131-ESAB.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated OBE12C3-PP116.5-001, 002, 003, 004, web to flange. The welder is identified as #040367 and was observed welding in the 1F (flat) position using approved Welding Procedure Specification WPS-B-T-2131-ESAB.

Cross Beam 17

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CB3001A-017-016, Side Panel to Bottom Panel hold back weld. The welder is identified as #067752 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-TC-U4b-FCM-1.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspectors are identified as Wang Li Yang and Zhou Peng. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 12BW/12CW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Bottom Plate transverse CJP splice.

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Edge Plate transverse CJP splice, counter weight side.

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This QA Inspector observed ABF personnel performing Magnetic Particle Testing on Bottom Plate WT stiffener hold back fillet welds.

Segment 12BE/12CE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Bottom Plate to side Plate hold back weld, cross beam side.

Segment 12AE

This QA Inspector observed tightening of high strength bolts on the SP and BP WT stiffener to Floor Beam web connection clip using the turn of nut method at panel point 109.

Segment 12CW

This QA Inspector observed match drilling for the Deck Plate U-rib splice plates at 12BW/12CW.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.









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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer